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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,972	10/19/2005	Milan Vasic	5734	8208
26936 7590 08/09/2007 SHOEMAKER AND MATTARE, LTD 10 POST OFFICE ROAD - SUITE 110 SILVER SPRING, MD 20910			EXAMINER BRITO PEGUERO, MERLIN	
			ART UNIT 2876	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/553,972	<b>Applicant(s)</b> VASIC ET AL.	
	<b>Examiner</b> Merlin Brito Peguero	<b>Art Unit</b> 2876	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 23-50 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 23-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>herewith</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Objections*

1. Claim 1 objected to because of the following informalities: the term "optionally" in part c) makes the claim unclear. This term should be removed to clarify the claim.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

- 2 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- 3 Claims 23-30, 32-45, and 47-49 rejected under 35 U.S.C. 102(e) as being anticipated by Alcock et al. (WO 0231780 A2-cited by applicant.)

**Re claim 23:** Alcock et al. discloses a method for determining the authenticity of an item (see pg. 2 L: 18-23), the item carrying a marking exhibiting a viewing-angle dependent light reflection spectrum, the method comprising steps of a) illuminating said marking with at least a first light source having first spectral characteristics (pg. 4 L: 14-16); b) collecting light reflected by said marking at least at two predefined different observation angles with respect to the plane of the marking, and measuring its respective intensity (see pg. 2 L: 19-23, and pg. 3 L: 8-12); c) optionally storing the

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measured intensity values of step b) in a permanent digital memory (see pg. 4 L: 17-25 Since calculations are being performed the data taken must be stored for at least that duration of time.); d) illuminating said marking with at least a second light source having second spectral characteristics (see pg. 4 L: 14-16); e) collecting light reflected by said marking at least at two predefined different observation angles with respect to the plane of the marking, and measuring its respective intensity (see pg. 4 L: 5-8); f) optionally storing the measured intensity values of step e) in a permanent digital memory (see pg. 4 L: 17-25 Since calculations are being performed the data taken must be stored for at least that duration of time.); and g) comparing said measured intensity values of steps b) and e) with previously stored corresponding reference values according to a predefined algorithm, and deriving an authenticity indicator from the comparison result using a pre-established decision criterion (see pg. 4 L: 17-25, and pgs. 6-7); wherein the illumination of steps a) and d) is a wide-angle illumination (see pg. 2 L: 18-25 Since there are more than one light sources they must be at different positions, therefore there would be a wide angle illumination.)

**Re claim 38:** Alcock et al. discloses a device for determining the authenticity of an item (see Fig. 1), carrying a marking exhibiting a viewing-angle dependent light reflection spectrum; said device comprising at least two light sources having different spectral characteristics for providing sequential illumination to said marking (see pg. 4 L: 14-16); at least two photodetectors with optional collection optics for collecting light reflected by said marking at least at two predefined, different observation angles and delivering an electric signal corresponding to the collected light intensity (see pg. 2 L:

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19-23, and pg. 3 L: 8-12); analog-to-digital converting, processing, controlling and memory means, for controlling the light sources, digitizing and storing reflected intensity values, for comparing said intensity values with previously stored corresponding reference values, and for deriving an authenticity indicator from the comparison result, all according to a predefined algorithm and using a pre-established decision criterion (see pg. 4 L: 17-25 the computing device serves as the analog-to-digital converter); wherein the device comprises a wide-angle illumination optics for guiding the light of said light sources to said marking(see pg. 2 L: 18-25 Since there are more than one light sources they must be at different positions, therefore there would be a wide angle illumination.)

**Re claim 24 and 39:** Alcock et al. discloses an item that is selected from the group consisting of a security document, a valued good or a packaging (see abstract L: 1-2.)

**Re claim 25 and 40:** Alcock et al. discloses a wide-angle illumination of the marking provided through a non-imaging-optics device (see pg. 26 L: 9-14.)

**Re claim 26 and 41:** Alcock et al. discloses non-imaging-optics device that is a compound parabolic concentrator (CPC) (see Fig. 1 as is illustrated two parabolic mirrors are used to focus the source light.)

**Re claim 27-28 and 42-43:** Alcock et al. discloses at least two predefined observation angles is chosen between  $0^{\circ}$  and  $45^{\circ}$ , and a second of said observation angles is chosen between  $45^{\circ}$  and  $90^{\circ}$ , with respect to normal to the plane of the marking (see Fig. 4B and 4C.)

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**Re claim 30 and 45:** Alcock et al. discloses light reflected by markings at said observation angles is measured after passage of said light through an optical filter [66] (see Fig. 5.)

**Re claim 32 and 47:** Alcock et al. discloses said illuminations having different spectral characteristics is provided by a light-emitting diode (LED) (see pg. 9 L: 12-14.)

**Re claim 33 and 48:** Alcock et al. discloses said illuminations having different spectral characteristics is provided by a laser diode (LD) (see pg. 9 L: 12-14 the monochromatic light serves as LD's.)

**Re claim 34 and 49:** Alcock et al. discloses illuminations having different spectral characteristics is provided by a light source equipped with an optical filter (see pg. 30 L: 1-4.)

**Re claim 35:** Alcock et al. discloses a delayed photoluminescence emission from said marking, in the UV-, the visible-, or the IR-range of the electromagnetic spectrum, is measured in addition to said viewing-angle dependent light reflection spectrum (see Figs. 4B and 4C.)

**Re claim 36:** Alcock et al. discloses magnetic property of the marking is measured in addition to said viewing-angle dependent light reflection spectrum (see pg. 2 L: 18-19 Light is electromagnetic radiation therefore the light reflected is electromagnetic radiation which Alcock et al. detects.)

**Re claim 37:** Alcock et al. discloses measured values and said previously stored corresponding reference values are obtained using the same physical device (see pg. 4 L: 16-25.)

**Re claim 50:** Alcock et al. discloses a programmed learning mode for determining reflected intensity values on a reference item and storing them as reference values in a digital memory, and a programmed testing mode for determining reflected intensity values on an item to be authenticated and comparing them with said previously determined and stored reference values, thereby deriving said authenticity indicator (see pg. 4 L: 17-25 the calculations preformed by the computer can be automated to run on its own so that the apparatus can be made into a smaller device.)

***Claim Rejections - 35 USC § 103***

4 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5 This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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6 Claims 29, 31, 44 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alcock et al. (WO 0231780 A2) in view of Schröder, Gottfried (DE 2033183.) The teachings of Alcock et al. are discussed above..

**Re claim 29 and 44:** Alcock et al. discloses fails to teach said observation angles are collected by the means of optical fibers.

Schröder teaches observation angles collected by the means of optical fibers (see English abstract.)

It would have been obvious to one of ordinary skill in the art, at the time of invention, to have combined Alcock et al. detection of printing and coating media with Schröder photoelectric detector for reading coding marks with the motivation that the fibers add to reduce size of the apparatus. Furthermore, the detectors can be housed at a different location since fibers guide light.

**Re claim 31 and 46:** Alcock et al. discloses fails to teach optical filters which are left-or a right-handed circular polarization filter.

Schröder teaches optical filters which are left or a right handed circular polarization filter (see English abstract.)

It would have been obvious to one of ordinary skill in the art, at the time of invention, to have combined Alcock et al. detection of printing and coating media with Schröder photoelectric detector for reading coding marks with the motivation that the circular polarizer's to reduce spurious reflections. Furthermore, the polarizer's would clear up the reflected light.



**Conclusion**


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Merlin Brito Peguero whose telephone number is (571) 270-1619. The examiner can normally be reached on Monday-Fridays 7:30 to 5:00 alt Fridays ET time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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07/24/2007

  
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